



AF/2700  
Haratsch 1-4  
3/28/03  
Jobbbs

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT APPLICATION

Applicant(s): Haratsch et al.  
Case: 1-4  
Serial No.: 09/326,785  
Filing Date: June 4, 1999  
Group: 2631  
Examiner: Pankaj Kumar

I hereby certify that this paper is being deposited on this date with the U.S. Postal Service as first class mail addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231

Signature: *Jim Morrison* Date: March 10, 2003

Title: Method and Apparatus for Reducing the Computational Complexity and Relaxing the Critical Path of Reduced State Sequence Estimation (RSSE) Techniques

RESPONSE AFTER FINAL REJECTION TRANSMITTAL

RECEIVED

MAR 26 2003

Assistant Commissioner for Patents  
Washington, D.C. 20231

Technology Center 2600

Box Non-Fee Amendment

SIR:

Submitted herewith is a Response After Final Rejection relating to the above-identified patent application. There is no additional claim fee due in conjunction with the Amendment.

In the event of any non-payment or improper payment of a required fee, the Commissioner is hereby authorized to charge or to credit **Deposit Account No. 50-0762** as required to correct the error. A duplicate copy of this letter is enclosed.

Respectfully submitted,

*Kevin M. Mason*

Date: March 10, 2003

Kevin M. Mason  
Attorney for Applicants  
Reg. No. 36,597  
Ryan, Mason & Lewis, LLP  
1300 Post Road, Suite 205  
Fairfield, CT 06430  
(203) 255-6560



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

## PATENT APPLICATION

5 Applicant(s): Haratsch et al.  
Case: 1-4  
Serial No.: 09/326,785  
Filing Date: June 4, 1999  
Group: 2631  
10 Examiner: Pankaj Kumar

I hereby certify that this paper is being deposited on this date with the U.S. Postal Service as first class mail addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231

Signature: *Tina M. Munn* Date: March 10, 2003

Title: Method and Apparatus for Reducing the Computational Complexity and Relaxing the Critical Path of Reduced State Sequence Estimation (RSSE) Techniques

RESPONSE AFTER FINAL REJECTION**RECEIVED**

MAR 26 2003

Assistant Commissioner for Patents  
Washington, D.C. 20231

Box AF

Technology Center 2600

SIR:

In response to the outstanding final Office Action, dated January 10, 2003, Applicants submit the following Remarks.

**REMARKS**

This Response is submitted in response to the outstanding final Office Action, dated January 10, 2003. Claims 1 through 22 are presently pending in the above-identified patent application. No additional fee is due.

In the Office Action, the Examiner rejected Claims 1 through 22 under 35 U.S.C. §102(b) as being anticipated by Amrany (United States Patent Number 5,319,585).

The present invention is directed to a method and apparatus for reducing the complexity of reduced state sequence estimation (RSSE) techniques for a given number of states while also reducing the critical path problem. The intersymbol interference due to the less significant tail taps of the channel impulse response is processed with a lower complexity cancellation algorithm using tentative decisions, while